

CLAIMS

I CLAIM AS MY INVENTION:

1. A method in a data processing system of tracking tools in a power plant service environment where a plurality of power plant facilities are interconnected in a Web-based environment over a communications medium with a tool depot wherein the tool depot houses a tool inventory used for providing a plurality of service activities to the plurality of power plant facilities, the method comprising:
 - providing a database containing information associated with respective tools in the tool inventory;
 - including in the database information uniquely associated with at least a first tool in the tool inventory;
 - assigning the first tool to a person at a power plant facility; and
 - recording data in the database that associates the person with the first tool.
2. The method of claim 1 further comprising:
 - updating the database with at least a portion of the recorded data sufficient to associate the person with the first tool.
3. The method of claim 1 further comprising:
 - creating an electronic tool order document containing information associated with at least the first tool wherein the tool order document is transmitted over the communications medium from the power plant facility to the tool depot.
4. The method of claim 3 further comprising:
 - creating an electronic default shipment document containing information relating to shipping at least the first tool from the tool depot to the power plant facility wherein the electronic default shipment document is automatically populated with at least a portion of the information transmitted to the tool depot in the electronic tool order document.

5. The method of claim 3 further comprising:

creating an electronic shipment document containing information relating to shipping at least the first tool from the tool depot to the power plant facility wherein the electronic shipment document is automatically populated with at least a portion of the information transmitted to the tool depot in the electronic tool order document.

6. The method of claim 3, the step of creating the electronic tool order document comprising:

populating at least a portion of an electronic tool order form displayed in an interactive Web page with information relating to at least one of the power plant facility and the tool depot and the first tool;

accessing the database over the communications medium from the power plant facility; and

selecting at least the first tool via an interactive Web page from at least one of a predefined tool list displayed in the Web page and a browse function displayed in the Web page wherein the browse function is configured to search the database and display information contained in the database associated with respective tools in the tool inventory.

7. The method of claim 3 further comprising:

updating the database in response to filling the tool order wherein a quantity of respective tools contained in the database is decremented by a quantity of the respective tools shipped to the power plant facility.

8. The method of claim 3 further comprising:

checking the database in response to receipt of the electronic tool order document at the tool depot to determine a status of at least one tool contained within the tool order document; and

creating a purchase order document for a tool in the event the step of checking identifies the status of the tool as unavailable.

9. The method of claim 3 further comprising:

including in the database information describing a status in response to receipt of the electronic tool order document wherein the status is indicative of tracking at least the location of tools identified in the electronic tool order document between the tool depot and the remote facility.

10. The method of claim 3 further comprising:

updating the database in response to filling the tool order wherein a quantity of respective tools contained in the database is decremented by a quantity of the respective tools shipped to the power plant facility;

including in the database information describing a condition of at least one tool prior to the at least one tool being shipped to the power plant facility;

assessing the condition of the at least one tool received at the tool depot from the remote facility;

updating the database in the event the step of assessing determines that the condition of the at least one tool has changed;

generating an invoice reflecting the cost of using the shipped tools at the remote facility; and

transmitting the invoice over the communications medium from the tool depot to the remote facility.

11. The method of claim 1 further comprising:

including in the database information describing a condition of at least one tool in the tool inventory;

including in the database information describing a status of at least one tool in the tool inventory;

receiving at least a tool at the tool depot wherein the tool is being returned to the tool depot from the power plant facility;

assessing the condition of the tool; and

updating the database with information describing the condition of the tool in the event the step of assessing determines that the condition of the tool has changed.

12. The method of claim 1 further comprising:

creating an electronic tool order document containing information associated with at least the first tool wherein the electronic tool order document is transmitted over the communications medium from the power plant facility to the tool depot;

5 creating an electronic shipment document containing information relating to shipping at least the first tool from the tool depot to the power plant facility wherein the electronic shipment document is automatically populated with at least a portion of the information transmitted to the tool depot in the electronic tool order document;

10 creating a return electronic shipment document containing information relating to shipping at least the first tool from the tool depot to the power plant facility wherein the electronic shipment document is automatically populated with at least a portion of the information transmitted to the tool depot in the electronic tool order document;

including in the database information describing a condition of at least the first tool prior to the first tool being shipped to the power plant facility;

15 assessing the condition of at least the first tool after its return to the tool depot;

updating the database in the event the step of assessing determines that the condition of the at least one tool has changed; and

updating the database with information indicating that the first tool is no longer assigned to the person at the power plant facility.

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13. A method of managing and tracking tools used in a power plant service environment wherein multiple power plants require services that necessitate the multiple utilization of an inventory of the tools stored in at least one tool depot, the method comprising:

- 5 providing a database containing information describing the inventory of tools;
 providing access to the database to respective end users at each of the multiple power plants via a communications medium;
 communicating over the communications medium an order for a set of tools to a tool depot; and
10 populating a shipping document with information relating to shipping the set of tools from the tool depot to a power plant.

14. The method of claim 13 further comprising:

- accessing the database from the power plant so that an end user at the power
15 plant may search the database via an interactive Web page for selecting at least one tool in the set of tools; and
 selecting the at least one tool via the interactive Web page to create the order.

15. The method of claim 14 further comprising:

- 20 automatically updating the database with information changing a status of the at least one selected tool.

16. The method of claim 13 further comprising:

- creating an electronic purchase order document for the purchase of at least one
25 tool.

17. The method of claim 16 wherein the electronic purchase order document is created in response to the order for the set of tools in the event at least one of the tools ordered is not available from the inventory of tools.

18. The method of claim 16 further comprising:
receiving the at least one purchased tool at a tool depot; and
updating the database with information indicative of a quantity of the received
5 tool.

19. The method of claim 18 further comprising:
updating the database with information indicative of at least one of a status and a
condition of the purchased tool.

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20. The method of claim 16 further comprising:
receiving notice at a tool depot that the at least one purchased tool has been
shipped by a vendor wherein the at least one purchased tool will be drop-shipped to a
power plant;
15 initiating a billing cycle for charging a cost to the power plant for use of the at
least one purchased tool; and
updating the database with information indicative of changing a status of the at
least one purchased tool from on-order to job-assigned.

20 21. The method of claim 13 further comprising:
updating the database with information indicative of at least one tool of the set of
tools having been shipped to the power plant;
initiating a billing cycle for charging a cost to the power plant for use of the
shipped tool; and
25 stopping the billing cycle associated with the shipped tool on receipt of the
shipped tool at the tool depot.

22. The method of claim 13 further comprising:
defining at least one tool kit comprising at least a subset of the inventory of tools;
storing data in the database indicative of information describing the at least one
tool kit; and
5 communicating an order for the at least one tool kit over the communications
medium to a tool depot.

23. The method of claim 13 further comprising:
creating a bill of lading containing data indicative of at least one of a Schedule B
10 Number and an Export Control Classification Number and a Harmonized Tariff
Schedule in response to the tool order.

24. The method of claim 13 further comprising:
including in the database information uniquely associated with at least a first tool
15 in the inventory of tools wherein the order for the set of tools includes the first tool;
checking out the first tool to a person at the power plant;
recording data at the power plant that associates the person with the first tool;
transmitting over the communications medium at least a portion of the data
entered in the step of entering; and
20 automatically updating the database with at least a portion of the transmitted
data sufficient to associate the person with the first tool.

25. A method of managing tools in a field service environment wherein a
plurality of service activities are performed at a plurality of job sites with a plurality of
25 tools, the method comprising:
using a first tool of the plurality of tools to perform a plurality of sequential service
activities;
storing in a database information uniquely associating the first tool with the
performance of the sequential service activities; and
30 accessing the database to reverse trace information regarding the use of the first
tool for performing the sequential service activities.

26. The method of claim 25 further comprising:
storing in the database information uniquely associated with a plurality of tool
users; and
updating the database with information identifying at least one tool user for each
5 use of the first tool for performing the sequential service activities.

27. The method of claim 25 further comprising:
determining whether the use of the first tool for performing the sequential service
activities resulted in an abnormal condition associated with at least one of the
10 sequential service activities.

28. The method of claim 27 further comprising:
assessing a condition of the first tool in the event the step of determining results
in at least one abnormal condition.
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29. The method of claim 28 further comprising:
determining whether the at least one abnormal condition resulted from the
condition of the first tool; and
performing a service activity to correct the at least one abnormal condition.
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30. The method of claim 25 further comprising:
communicating an order for the first tool over a communications medium to a tool
depot housing a tool inventory wherein the first tool is ordered for performing at least
one of the plurality of sequential service activities;
25 creating a shipping document containing information relating to shipping the first
tool from the tool depot to a first job site; and
automatically decrementing a quantity of the first tool contained in the database.

31. The method of claim 30 further comprising:
30 assigning the first tool to a person at the first job site; and
recording data at the first job site associating the person with the first tool.

32. The method of claim 25 further comprising:
- including in the database a calibration due date for the first tool;
 - including in the database an inspection due date for the first tool;
 - determining whether the first tool needs to have at least one of a calibration
- 5 service and an inspection service performed prior to being used for the next sequential service activity; and
- providing notice if in the step of determining the first tool needs to have at least one of a calibration service and an inspection service performed prior to being used for the next sequential service activity.
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33. The method of claim 25 wherein the first tool is shipped between at least two of the plurality of job sites prior to being returned to a tool depot.